HORTICULTURE
for the home gardener

County of Los Angeles Department of Arboreta and Botanic Gardens

DICHONDRA

DESCRIPTION

Dichondra micrantha is a small broad leaved perennial herb that has been found growing naturally on most continents. Due to the similarity between the types on other continents and the variability within localized environments, nobody is certain how many species exist. It is now felt that all the dichondras grown in the United States for turf are the same species.

GROWING REQUIREMENTS

Dichondra likes heat and bright sunlight. High temperatures and shaded conditions stimulate taller growing plants. Cool conditions retard its growth, 25°F. causes leaf edges to brown, 10°F. will kill the top. Walking on dichondra during frost conditions will damage the lawn and brown footprints will show until spring growth begins. Dichondra requires high amounts of organic material in the soil and high amounts of nitrogen to perform at its best. Use one half pound of actual nitrogen per 1000 square feet per month. This works out to 1½ pounds of ammonium nitrate or 2½ pounds of ammonium sulfate. After fertilizing, knock or wash the material off the leaves to prevent burning.

STARTING A DICHONDRA LAWN

Preparing the seedbed for a dichondra lawn is the same as for a grass turf; however, special attention should be given to deep cultivation (1 to 2 feet) and avoiding soil compaction. Incorporating a large amount of organic material is important. Eliminating weedy roots and seeds in the soil at this point will curb weed control problems as the dichondra establishes itself. Fumigation with methyl bromide is best, but this requires a licensed applicator. Home gardeners may want to use Vapam or other commercially available fumigants.

Sow seed after the weather has warmed up between April and June, using one pound of seed for 1000 square feet. Dichondra seed will germinate in one week during warm weather, and a solid turf will be established in six to eight weeks. Dichondra may be mowed weekly at one-half to one inch. In partial shade, two or three inches is preferable. Frequent mowing will serve to eliminate weeds, and if mowed often, clippings may be left on the lawn.

ROUTINE CARE

In addition to monthly feedings of nitrogen during warm summer months, an application of a complete lawn fertilizer should be applied once a year. In ordinary soils, once a week watering with one to two inches of water is sufficient. It is best to water in the morning so it will be dry at night and less prone to fungus invasion. An automatic sprinkler system set to water every day is an invitation for trouble. Before watering, the lawn should be allowed to dry out. This allows the roots to breathe and disrupts fungal activity. To check, walk on the dichondra. If you can see your footprints, it is time to water. Both dichondra and grass take on a bluish tinge as they reach the point of wilting. It comes as a surprise to most people that if you allow the dichondra to dry up to the point where all the leaves die and then water, it will come back. It is not delicate in this respect and a miscalculation will not kill a dichondra lawn.

Sometimes in the spring a well-tended dichondra lawn will begin dying off at an alarming rate for no apparent reason. This is caused by heavy seed production. Approximate 12 hour days in the spring combined with temperatures between 60 to 70°F. will result in heavy flowering and seeding. Light fertilization will cause rapid regreening.

-Continued-

WEEDS & WEEDKILLERS

Some chemicals have been introduced to the market that show limited selectivity for weeds in dichondra.

Ammonium sulfamate - a contact foliage herbicide for oxalis and spurge. It does not harm the roots. Actually, it is a strong fertilizer solution designed to burn the foliage of spurge and oxalis.
Dalapon - a contact grass herbicide. Repeat applications in conjunction with diphenamid will be required for bermuda grass control. Very effective on St. Augustine grass.
Diphenamid - Pre- and post-emergence grass herbicide.
Disodium methyl arsonate hexahydrate - Effective in killing oxalis and crabgrass.
DSMA [Disodium methanearsonate] - Controls crabgrass, dallisgrass and nutsedge.
Monuron - Pre-emergent control of annual weeds including spurge and oxalis.
Napropamide [Devrinol] - Pre-emergent for *Poa annua* and spurge. Available in bags mixed with dichondra fertilizers.
Neburon - Pre-emergent control of annual weeds including spurge and oxalis.
Sodium thiocyanate - Kills foliage of oxalis, but not roots. Many repeat sprays are necessary on a weekly basis to starve the roots.

The above are chemical names, not product names, so be sure and look at the list of ingredients. The selectivity is limited and timing the application is important. Read the directions and then mark your calendar.

INSECTS AND OTHER PESTS

The main insect enemy of dichondra is the flea beetle. Eggs are laid in the spring and the larvae begin eating the roots. The adults eat tracks through the leaves. By the time the adult damage is seen, the root system is destroyed. The damage usually starts at the edge of the turf near a sidewalk or lawn border.

For dichondra flea beetle and other possible pests, like the vegetable weevil and cutworms, use diazinon or Dursban in December and June treating twice, 7 to 10 days apart. If snails are a problem, monthly treatments of lawn borders and quarterly treatment of the whole lawn may be necessary. Mesurol and metaldehyde provide adequate control. Mites may damage a dichondra lawn. Their populations build up after the weather turns hot. If when looking at a single leaf you see a white stippling, it may be caused by mites. Use kelthane or orthene. Spray hard and from the sides and from different directions to bend the leaves over and wet the undersides.

DISEASES

Most dichondra root rot is caused by usually nonpathogenic fungi that are often present in the soil. They become harmful when the dichondra roots are deprived of air due to overwatering. Most root rot occurs in autumn when temperatures cool off and evaporation slows and homeowners forget to reduce the amount of water applied by automatic sprinkler systems.

Several fungus pathogens can attack dichondra. If you have yellowing or spotting of leaves or a general thinning of the turf you can try chlorothalonil or Benlate and mancozeb fungicides. If alternaria leaf spot is a problem (leafspots contain concentric zones) spray with a fungicide containing chlorothalonil or Bayleton. If overall yellowing occurs and close inspection reveals elongated leaves with rust colored spores standing above their healthy neighbors, you have rust. Bayleton applied twice at the curative rate is a good control.

Poor dichondra growth may be due to nematodes which are tiny, almost microscopic, worms which can be very injurious to dichondra roots. You have two choices. You can fumigate, which is the only way to kill nematodes, or you can plant a mix of several different grasses. The one that grows the best will form your new lawn.

A well tended dichondra lawn may be seen at Ambassador Collge, 300 West Green St., Pasadena. Ambassador College is the site of the largest dichondra installation in the world.

6/85